

JUN 4 2002

Form approved through 3/31/98
OMB No. 0925-0002Department of Health and Human Services
Public Health Service**National Research Service Award
Termination Notice**

1. NAME OF FELLOW OR TRAINEE (Last, first, middle initial, and degree)

Collins, Christopher J.

2. FELLOWSHIP OR TRAINING GRANT NO.

T32 CA 09270

3. NAME OF SPONSORING INSTITUTION

University of California, San Francisco

4. SOCIAL SECURITY NO.

465-71-5383

5. DEGREE SOUGHT/COMPLETION DATE

None

6. DATES OF NRSA SUPPORT UNDER THIS AWARD (Month, day, year): FROM: 7/1/00 TO: 6/30/01

7. TOTAL NRSA STIPEND RECEIVED AND NUMBER OF MONTHS SUPPORTED UNDER THIS AWARD (See specific instructions for Amount of Stipend.)

YEAR OF SUPPORT	AMOUNT OF STIPEND	NUMBER OF Months Days		YEAR OF SUPPORT	AMOUNT OF STIPEND	NUMBER OF Months Days	
1st Year	\$26,916.00	12	0	5th Year			
2nd Year				6th Year			
3rd Year				7th Year			
4th Year				TOTALS	26,916.00	12	0

8. Provide a summary of training received and research undertaken during fellowship or trainee tenure. List publications, if any, resulting from the research during this period. List grants and career awards pending and received. If fellowship or training appointment is being terminated early, state reason.

New Chemical Crosslinking Reagents for a New Method to Determine Low-Resolution Protein Structure

Ten new synthetic chemical crosslinking reagents were made to further develop a new method for determining low-resolution protein structure, Mass Spectroscopy in 3-Dimensions (MS3D). A set of four aliphatic homobifunctional lysine-reactive crosslinkers with varying distances between the sulfoNHS reactive end groups were made to map the possible distances between the lysine residues in a protein and to establish a lower bound for the method. Oxygen-18 isotopic labels were incorporated into an analogous set of four reagents. Crosslinking experiments of the isotopically labeled reagents with HIV Integrase gave approximately a 6-fold increase in signal-to-noise ratio and allowed for easy discrimination of crosslinked peptides from other peptide species by mass spectroscopy. Two trifunctional crosslinking reagents were made containing two lysine-reactive sulfoNHS groups and a biotin affinity tag. The biotin affinity tagged reagents should allow for easy separation of crosslinked peptides from a proteolytic mixture by avidin affinity chromatography and effectively increase the signal-to-noise ratio of the method.

9a. INDICATE POST-AWARD ACTIVITY (e.g., teaching, graduate student, research), POSITION TITLE, FIELD, NAME OF ORGANIZATION, CITY, AND STATE

Research Scientist
SRI International, Menlo Park, CA
christopher.collins@sri.com

9b. TELEPHONE NO. 650-859-2296

11. OTHER PHS SERVICE OBLIGATION SUPPORT

NHSC Scholarship: No. of months: _____

NRSA: No. of months: _____ Period of support: _____

Grant no.: _____

None

10a. MAILING ADDRESS AFTER TERMINATION OF THIS NRSA SUPPORT
(Street, city, state, zip code)SRI International
Biopharmaceutical Discovery Division
333 Ravenswood Avenue
Menlo Park, CA 94025-3493
christopher.collins@sri.com

10b. TELEPHONE NO. 650-859-2296

12. SIGNATURE OF FELLOW OR TRAINEE (see specific instructions)

Chris J. Collins

DATE

5/23/02

13. Certification of Sponsor or Program Director: that to the best of my knowledge all the above information is correct.

SIGNATURE OF SPONSOR OR PROGRAM DIRECTOR

DATE

5/23/02

TYPED NAME OF SPONSOR OR PROGRAM DIRECTOR

Keith Robert Yamamoto

14. Business Official's Verification of Items 6 and 7. (Not applicable to individual fellows at Federal or foreign institutions.)

SIGNATURE

DATE

5/31/02

TYPED NAME OF BUSINESS OFFICIAL

TELEPHONE AND FAX NOS.

FOR: JEFF YEPSEN

(415) 502-8215

15. The information provided in Items 6 and 7 is in agreement with PHS records. (For PHS use only.)

SIGNATURE

DATE

6-7-02

TYPED NAME AND AWARING COMPONENT OF PHS OFFICIAL